## DEPARTMENT OF ENVIRONMENTAL QUALITY Environmental Assessment

## Permitting and Compliance Division Water Protection Bureau

Name of Project: City of Conrad, Wastewater Treatment Plant

**Location of Project**: One mile NE of City of Conrad

City/Town: Conrad County: Pondera

**Description of Project**: This is a modification to MPDES permit MT0020079 for the domestic wastewater treatment plant used by the City of Conrad. The City requested a permit modification to relocate Outfall 001 for use in conjunction with completion of a plant upgrade project.

**Agency Action and Applicable Regulations**: The proposed action of the Department is to modify the MPDES permit.

Applicable rules and statute:

ARM Title 17, Chapter 30, Sub-chapter 5 – Mixing Zones in Surface and Ground Water.

ARM Title 17, Chapter 30, Sub-chapter 6 – Surface Water Quality Standards.

ARM Title 17, Chapter 30, Sub-chapter 7 – Nondegradation of Water Quality.

ARM Title 17, Chapter 30, Sub-chapters 12 and 13 – Montana Pollutant Discharge Elimination System Standards.

MCA 75-5-101 et. seq., Montana Water Quality Act.

**Summary of Issues**: The City of Conrad requested a permit modification to relocated Outfall 001 to a new location approximately 3,220 feet upstream from the current outfall location in order to allow the upgraded wastewater treatment facilities to discharge by gravity and to avoid the costs of installing approximately 2,500 feet of outfall line.

## **Affected Environment & Impacts of the Proposed Project:**

Y = Impacts may occur (explain under Potential Impacts). *Include frequency, duration (long or short term), magnitude, and context for any significant impacts identified. Reference other permit analyses when appropriate (ex: statement of basis). Address significant impacts related to substantive issues and concerns. Identify reasonable feasible mitigation measures (before and after) where significant impacts cannot be avoided and note any irreversible or irretrievable impacts. Include background information on affected environment if necessary to discussion.* 

N = Not present or No Impact will likely occur. *Use negative declarations where appropriate (wetlands, T&E, Cultural Resources).* 

IMPACTS ON THE PHYSICAL ENVIRONMENT		
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES	
1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?	[N] The wastewater treatment plant has been located at this site for 50 years. Soils at the treatment plant site and the relocated outfall site are identified from USDA soils surveys as Haploborolis-Argiborolis complex, typically a gravelly clay loam of alluvial origin with variable drainage ranging from somewhat poorly drained to well drained. No fragile, erosive or unstable soils are noted and there are no identifiable unusual or unstable geological features. Construction at the project will meet or exceed current engineering design criteria, including seismic, soils and construction stormwater control considerations.	
2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?	[N] The wastewater treatment plant has discharged to this same receiving water for 50 years. The modified outfall location will discharge to the same perennial unnamed tributary to the Dry Fork of the Marias as does the current outfall. The receiving water is incapable of providing for marginal growth and propagation of salmonids and, during a monitoring study conducted from June through October of 2006, the streamflow in the area of the relocated outfall was either zero or too low to measure in four of the five months studied. The discharge at the new location will not occur until the wastewater treatment plant upgrades are completed and will be a higher quality effluent discharge than the current discharge, because of new effluent limitations that are included in the current MPDES permit.	
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N] The modified outfall location will have no impact on air pollution and the upgraded wastewater treatment plant should reduce odors that occur with the present facilities.	
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	[N] Impact on area vegetation will be insignificant and any disturbed areas will be revegetated as part of the wastewater treatment plant upgrade project. Relocating the outfall will reduce surface disturbance by reducing the length of the outfall line required by approximately 2,500 feet.	
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	[N] The wastewater treatment plant has been at this same location for 50 years and relocation of the outfall is not expected to impact wildlife, birds or fish.	
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?	[N] The wastewater treatment plant has been at this same location for 50 years and relocation of the outfall is not expected to adversely impact threatened or endangered species, species of special concern or wetlands. A threatened species, Piping Plover, is thought to possibly inhabit some open beach, alkalai flat and sandy area habitats in Pondera County but such habitats do not exist near the location of the relocated outfall. A wetlands environment located about ½ mile downstream from the relocated outfall should not be adversely impacted and may well be enhanced by the increased streamflow.	

IMPACTS ON THE PHYSICAL ENVIRONMENT		
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] The wastewater treatment plant has been at this same location for 50 years and no historical, archaeological or paleontological resources are known to exist in the vicinity.	
8. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	[N] The wastewater treatment plant has been at this same location for 50 years and relocating the outfall will have no impact on aesthetics. The plant location is not on a prominent topographic feature, will not be visible from populated or scenic areas (although the plant is visible from nearby I-15), and there will not be excessive noise or light.	
9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project? Will new or upgraded powerline or other energy source be needed)	[N] No impacts associated with the relocated outfall. The upgrade of the wastewater treatment plant to meet permit effluent limitations may or may not require an upgraded powerline to the site.	
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	[N] None known or anticipated.	

IMPACTS ON THE HUMAN ENVIRONMENT		
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N] No impacts expected.	
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N] No impacts expected. A sand and gravel operation diverts water from the receiving stream approximately 0.7 miles downstream from the relocated outfall (approximately 500 feet downstream from the current outfall) but the amount of water available for diversion is not expected to be reduced by relocation of the outfall.	
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] Although the construction project for the wastewater treatment plant upgrade, which includes relocation of the outfall, will create short term construction jobs in the area.	
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] No impacts expected.	
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N] No continuing impacts, although a slight increase ine road traffic would be expected from the wastewater treatment plant upgrade project, which includes relocation of the outfall.	
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N] No impacts expected. The wastewater treatment plant has been at this same location for 50 years.	

IMPACTS ON THE HUMAN ENVIRONMENT		
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	[N] No impacts expected. No wilderness or recreational areas accessed through this site and no potential for recreational development.	
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N] No impacts expected.	
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] No impacts expected.	
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N] No impacts expected.	
21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N] No impacts expected.	
22(a). PRIVATE PROPERTY IMPACTS: Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.	[N] No impacts expected.	
22(b). PRIVATE PROPERTY IMPACTS: Is the agency proposing to deny the application or condition the approval in a way that restricts the use of the regulated person's private property? If not, no further analysis is required.	[N]	
22(c). PRIVATE PROPERTY IMPACTS: If the answer to 21(b) is affirmative, does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and analyze such alternatives. The agency must disclose the potential costs of identified restrictions.		

23. Description of and Impacts of other Alternatives Considered: A. No Action: Denying approval of the City of Conrad's request to relocate Outfall 001 would have resulted in significantly higher project construction costs for the upgrade of the City's wastewater treatment plant and would have resulted in higher annual operation and maintenance costs at the plant. B. Approval with modification: No reasonable modification options exist. 24. Summary of Magnitude and Significance of Potential Impacts: None 25. Cumulative Effects: None 26. Preferred Action Alternative and Rationale: Approve the request to modify the MPDES permit to allow discharge from the upgraded wastewater treatment plant through a new Outfall 001 location. The MPDES program provides the regulatory mechanism for protecting water quality by enforcement of the terms of the permit. **Recommendation for Further Environmental Analysis:** [ ] EIS [ ] More Detailed EA [X] No Further Analysis Rationale for Recommendation: 27. Public Involvement: The Department intends to issue a public notice and solicit public comment on this action. All substantive comments will be considered in development of the final permit modification. 28. Persons and agencies consulted in the preparation of this analysis: None **EA Checklist Prepared By:** James F. Brown Date: November, 2008 **Approved By:** Jenny Chambers, Chief Date Water Protection Bureau